

Remarks/Arguments

Reconsideration of this application is respectfully requested.

The foregoing amendment Accompanies a request for continuing examination (RCE) being filed in connection with the above identified application. A petition for a 4 month extension of time to renew applicant's petition to revive the above identified application, to enable applicant to file an RCE with this amendment, also accompanies this amendment.

According to the foregoing amendment, applicant respectfully submits the following responses to the examiner's rejections:

In response to complaint 3 Claim Rejections- 35 USC § 101:

a) Claims 8, 10, and 12 were amended to recite a functional change to due to the application program resulting in a useful, concrete, and tangible result. As claims 9, 11, and 13-17 are dependent upon claims 8, 10, and 12 this resolves any inherited deficiencies.

b) Claims 9, 11, and 13-17 were amended so that they are in proper dependent claim format

c) As noted by the examiner, *In re Warmerdam*, 33 f.3d 1354, 1360 (Fed. Cir. 1994), states that a patent cannot be obtained on claims which simply cite a mathematical algorithm, either indirectly or directly. *AT&T Corp. v. Excel Comm., Inc.*, 172 F.3f 1351, 1360 (C.A. Fed. 1999), limited this holding to be a simple repetition of the basic principle "that mere laws of nature, natural phenomena, and abstract ideas are not within the categories of inventions or discoveries that may be patented under 35 U.S.C. §101." The current patentability standard for software is most clearly expressed by the U.S. Court of Appeals for the Federal Circuit in *State Street Bank & Trust Co., v. Signature Fin. Group* 149 F.3d 1368, 1375 (C.A.Fed. 1998) stating that a claim on a software invention which produces a "useful, concrete, and tangible result....even if the result is expressed in numbers" is statutory matter and therefore patentable. I respectfully submit that the invention as now claimed in this application has been written to conform to the new standard expressed in *State Street Bank* as well as the standard of *In re Warmerdam*. The application has a useful, concrete, and tangible result in that it provides an intelligent

and independent system for making and receiving payments on various types of internet transactions without the need for the system to receive constant instructions from any particular source. All information regarding the transactions are stored on a storage medium and are computer readable, allowing the user to monitor them and adjust parameters as needed.

In response to complaint 4 Claims Rejections - 35 USC § 112, first paragraph:

Applicant respectfully submits that claim 15 as amended complies with the enabling requirement of 35 USC § 112 first paragraph. As the claim now reads, one skilled in the art at the time the application was filed, September 5, 2000, would be enabled to make and use the invention; the very nature of data packets are that they always split a longer body of information into shorter ones. Therefore, a person skilled in the art would understand the concept of reducing the transitional data-packets into even smaller information packets called transactional data sub-packets.

In response to complaint 5.1 Claims Rejection – 35 USC § 112, second paragraph:

Applicant amended claim 15 to comply with the requirement of 35 USC § 112, second paragraph to distinctly point out and claim the subject matter which the applicant regards as the invention. Applicant respectfully submits that as the claim now reads, one skilled in the art at the time the application was filed, September 5, 2000, would understand that each of the transactional data sub-packets are select portions of the transactional data-packet, each carrying a particular piece of information of the larger transactional data-packet. Rather than each packet controller and packet wallet consisting of several packets, as stated in the examiner's rejection, one transactional data sub-packet may carry, for example, just the packet wallet, the next may carry just the packet controller, and so forth. The transactional data sub-packets are a manner of dividing a transactional data-packet which has become so long that it is unwieldy into smaller information segments that can more efficiently travel around.

In response to complaint 5.2 Claims Rejection – 35 USC § 112, second paragraph:

Applicant amended claim 15 so that all limitations now have a proper antecedent basis and the claim complies with 35 USC § 112, second paragraph.

In response to Point 6 of Advisory:

Applicant is attempting to comply with the examiner in addressing the teaching of references listed the advisory.

In response to complaint 7 Claims Rejection - 35 USC §102:

This rejection was based on Biffar (US Patent 6,047,289), which also affects claims 8-14 and 16-17. Because the issues are similar or identical for each of these claims, the applicant address them mostly together.

It is respectfully submitted that Biffar's innovation is entirely different in scope, approach, technology, and operations. In consequence, there are no similarities or anticipation of the Biffar patent and the submitted patent application. Biffar is an electronic fund transfer system whereas the submitted patent application takes the entire system of packetized communications a step further. Arguably, the major contribution of traditional packetized data communications, going back to the 1960s, had been to integrate, in the same packet of bits, content information with information about recipient and destination address, thereby enabling the content to be routed without further instructions from the sender or from a central controller.

The key aspect of the claimed invention is to add to the packet content and address, a means of payment, and transaction intelligence (a packet controller), *all in the same packet (or associated group of follower packets)*. In that fashion, the content information becomes capable of transacting as an *independent agent* controlled by its own packet controller and not just following instructions of a central system or of hardware devices. It becomes capable of paying for services rendered to it, such as network transmission, and of collecting payments and returning them back home. The packet also becomes capable of buying services or selling information based on changing prices,

engaging in such transactions based on its own decision calculus. The interaction of these numerous independent agents with the facilities from which they buy and sell creates a real-time market mechanism, not just a method to pay for transactions.

Patent 6,047,269 claims a method different in at least the following ways:

1. Its “digital vouchers,” the key component, are separate from the information content and the underlying transaction itself. In this patent application the means of payment, transaction mechanism, and content are integrated and travel together. The information travels with its own money and control mechanism, enabling it to act as an independent agent. Biffar’s vouchers, in contrast, are merely envelopes for cash, with a record for the transactions, the ability to keep some money after payment of a lesser amount, based on a processor *outside of the voucher*, and without the independence of the transaction agent. The distinction of Biffar’s payments voucher and the transactional data packets of this application can be seen by comparing Biffar’s *Figure 1A* with this invention’s *Figure 1*. Biffar’s voucher merely represents *one* of the component items of the transactional data packet, specifically item 20, (of 14 different component items). Conversely, this invention does not include elements corresponding to Biffar’s dynamic log 20000 (21000-26000) and to major parts of the identifying element 10000, such as the serial number, account number, and other data. The only item the two inventions overlap in is the concept of the access token, which is not claimed in this application.

2. In Biffar’s Patent 6,047,269, the vouchers are being identified, and each transaction is being logged on the voucher, and can be checked up and re-traced. In contrast, in the invention claimed here data packets proceed without such identification and monitoring, similar to of cash transactions, vs. checking and credit card-style transactions. This allows liquidity and a move of the payment tokens, enabling market transactions.

3. The Biffar system is tightly controlled and “self-contained;” its participant devices must be “initialized” with an “identification number,” there is a “central system” in control, it requires “attached logs” of transactions, establishes “digital signatures,” “receipts,” and enables a “recreation of the movement of a voucher,” by “authorized

persons,” with transactions that might have a centrally-set “limit” that “forces” vouchers back into the “central system.” None of this is needed in the proposed invention. This invention establishes a system that operates without such central controls and is not part of a self-contained system, but which is based on the decentralized transactions of packets managed by their own packet controllers. Biffar is also not a real-time system. To analogize, Biffar’s fund transfer system resembles more a paper trail of a credit card payment system; whereas the system of this application resembles more a person possessing content information plus intelligence, carrying cash, and engaging in transactions. Biffar’s vouchers do not possess independent transactional capability beyond payment, nor do they contain content information such as media-type information.

4. Biffar’s “Central System” (basically a bank) is not comparable to the “Issuer of Tokens” (*Figure 2*, item 50) in this application. Both issue tokens, but the system claimed here does not exercise control as in Biffar, it is merely one of multiple issuers and redeemers of access tokens.

5. In the applied-for system the devices utilized such as transmission networks or facility wallets do not receive instructions, which is in contrast to Biffar’s system that has remote devices instructed by the central system. In the applied-for system, the transactions are between the transaction token controllers and the facilities’ wallet controllers; there is no need for direct control of these transactions by the central system, within broad parameters of task definition.

6. In Biffar’s system, log digits pertaining to the history of transactions record these transactions. (*Figure 1A*, History Part n etc, 21000-214000). In contrast, the convoy information field in this application (*Figure 1*, item 14) is merely a listing of the associated packet group in a longer transaction, specifically a listing of a string of payload data in follower packets. There is no similarity to the two concepts.

7. Biffar’s log, as aforementioned, records the transaction history to enable its recreation for security purposes. This is different from this invention’s facility access controller (*Figure 2*, item 64) that establishes access conditions for follower packets, subsequent to the establishment of a transaction through the transaction packets. There are

no such transactions in Biffar's scheme that unlock access to follower packets, and indeed there are no follower packets, and not even definable packets at all.

Thus, Biffar's Patent 6,047,295 creates a very different system. It creates a kind of "electronic Brink's truck" as a fund transfer mechanism to pay for transactions entered separately, to record these transactions, all within a tightly controlled and self-contained system whose purpose is to maintain security. In contrast, the applied-for invention creates openness, through autonomous agents and their transactions, which enable self-organizing markets. The agents are based on the integration of content information, means of payment, and transaction control. The system is not concerned with recording, authorization, recreation, or identification. Its major application might be a rapid, real-time micro transactions involving media use by consumers. Whatever similarity might exist is solely that both methods move payments electronically. But other electronic methods of payments exist in a variety of ways, all expressing money through electronic strings. That concept is not the claim of this application

In conclusion, Biffar's system is entirely different in concept. Biffar's is basically a payment method. This invention is basically a transaction system. The two may seem similar, as both create payment mechanisms, but they are very different in approach. Biffar aims to create a secure and controllable payment mechanism within a self-contained system. This invention aims at something different: to create a mechanism for market transactions by autonomously acting blocks of information that incorporate information content as well as payment means and an internal control mechanism. The application does not mention the term "security;" Biffar, as far as could be observed, does not mention the term "markets". The aims of the two inventions are entirely different, as are the proposed systems in technological terms.

The applicant has earnestly tried to find an overlap in the claimed prior art, but the additional patents and articles provided to me actually strengthen my confidence in the novelty of my application. Just as the concept of data packets and of packet switching, novel in the 1960s, revolutionized data communications and enabled the Internet, so does my expansion of this concept to incorporate means of payment and of

control enable decentralized electronic transactions, and can be the basis for an entirely new level of network development and electronic transactions.

The applicant will be happy to clarify any remaining question the examiner may have.

Accordingly, it is respectfully submitted that the foregoing claims define the applicant's invention in a manner not disclosed in or obvious from the cited references.

Favorable action is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Eli M. Noam', written over a horizontal line.

Eli M. Noam